

CLAIMS

1. A method in a multi-mode wireless communications device capable of operating in CDMA and GSM communications modes, the method comprising:

operating the multi-mode wireless communications device in CDMA communications mode;

while operating in CDMA communications mode, generating an origination message including information indicating an ability of the multi-mode wireless communications device to operate in GSM communications mode.

2. The method of Claim 1, generating the origination message includes setting a first field indicating that the origination message includes a second field indicating that the multi-mode wireless communications device is able to operate in GSM communications mode.

3. The method of Claim 2, generating the origination message includes setting the second field to indicate that the multi-mode wireless communications device is able to operate in GSM communications mode.

4. The method of Claim 3, setting the second field includes indicating whether the multi-mode wireless communications device is capable of communicating in at least one of a GSM single-slot mode and a GSM multi-slot mode.

5. The method of Claim 1, transmitting the origination message while operating in CDMA communications mode.

6. The method of Claim 5, receiving a channel assignment message, in response to sending the origination message, while operating in CDMA communications mode, the channel assignment message including GSM assignment information.

7. The method of Claim 6, receiving the channel assignment message includes receiving an instruction to acquire a GSM network before receiving a channel allocation.

8. The method of Claim 6, receiving the channel assignment message includes receiving a GSM channel allocation in the channel assignment message.

9. The method of Claim 1, indicating that the message includes additional mode information by setting a flag indicating that additional mode information is included in the message.

10. A method in a multi-mode wireless communications device capable of operating in first and second communications modes in corresponding first and second networks, the method comprising:

operating the multi-mode wireless communications device in the first mode communications mode on the first network;

while operating in the first communications mode, generating a message including information indicating an ability of the multi-mode wireless communications device to operate in a second communications mode on the second network,

the message is one of an origination message and a page response message.

11. The method of Claim 10, generating the message include setting a flag indicating the presence of the information indicating the ability of the multi-mode wireless communications device to operate in the second communications mode.

12. The method of Claim 10,
indicating an ability of the multi-mode wireless
communications device to operate in a third communications mode on one
of the first and second network.

13. A message for origination or page response by a multimode
communications device, the message comprising:

a first additional mode information field of the message for
indicating an ability of a multimode communications device to accept a
channel assignment in a first additional mode other than a first mode;

a second additional mode information field of the message for
indicating an ability of the multimode communications device to accept a
channel assignment in a second additional mode other than the first mode
and the first additional mode.

14. The message of Claim 13,
the first mode is a CDMA communications mode,
the first additional mode is an analog communications mode,
the first additional mode information field for indicating an
ability of the multimode communications device to accept a channel
assignment in one of the CDMA communications mode and the analog
communications mode.

15. The message of Claim 13,
the second additional mode is a GSM communications mode,
the second additional mode information field for indicating an
ability of the multimode communications device to accept a channel
assignment in the GSM communications mode.

16. The message of Claim 13,
the first additional information field for indicating a preference
of the multimode communications device to accept a channel assignment in
one of the first mode and the first additional mode,
the second additional information field for indicating an ability
of the multimode communications device to accept a channel assignment in
the second additional mode.

17. The origination message of Claim 13,
a second additional mode flag field of the message for
indicating the presence of information in the second additional mode
information field.

18. The origination message of Claim 13,

the second additional mode information field of the message for indicating an ability of the multimode communications device to accept a channel assignment in a second additional mode pursuant to at least one of a GSM communications protocol, an 802.11 communications protocol, a UMTS communications protocol, and voice over IP communications protocol.

19. A method in a CDMA communications network, the method comprising:

generating a channel assignment message;
providing GSM channel assignment information in the channel assignment message.

20. The method of Claim 19, providing GSM channel assignment information in the channel assignment message includes providing information indicating that additional GSM channel assignment information is provided in the channel assignment message.

21. The method of Claim 19, providing GSM channel assignment information in the channel assignment message includes

providing assignment information for one of a GSM access grant channel or a GSM dedicated channel.

22. The method of Claim 19, providing GSM channel assignment information in the channel assignment message includes providing information to re-send one of an origination message or page response message on a GSM Channel.

23. The method of Claim 19,
transmitting the channel assignment message to a wireless communications device connected to the CDMA communications network,
providing the GSM channel assignment information in the channel assignment message includes providing a direct channel assignment.

24. The method of Claim 19,
transmitting the channel assignment message to a wireless communications device connected to the CDMA communications network,
providing the GSM channel assignment information in the channel assignment message includes providing an access grant channel for the communications device to complete set up on the GSM network.

25. A method for network resource allocation in a first communications network, the method comprising:

receiving a message from a multimode mobile station;

generating a channel assignment message for the multimode mobile station operating in a first communications on the first network in response to the message;

assigning the multimode mobile station to a second network in the channel assignment message;

transmitting the channel assignment message to the multimode mobile station.

26. The method of Claim 25,

assigning the multimode mobile station to a second network in the channel assignment message includes providing a direct channel assignment in the channel assignment message.

27. The method of Claim 25,

assigning the multimode mobile station to a second network in the channel assignment message includes providing an access grant channel for the communications device to complete set up on the second network.

28. A method in a multimode communications device, the method comprising:

receiving a channel assignment message while operating in a first mode pursuant to a first communications protocol,

the channel assignment message including channel assignment information for a mode of operation pursuant to a second communications protocol;

transitioning to one of an access grant channel or a dedicated channel based on the channel assignment information for the different mode of operation.

29. The method of Claim 28, operating pursuant to a second communications protocol pursuant to the different mode of operation;

30. The method of Claim 28, the first mode is CDMA mode, the second mode is GSM mode,

31. A channel assignment message native to a first communications protocol for transmission to a multimode communications device operable in a mode pursuant to the first communications protocol

and operable in at least one other mode pursuant to a second communications protocol, comprising:

channel assignment information of the channel assignment message including assignment information for one of an access grant channel of the second communications protocol or a dedicated channel of the second communications protocol.

32. The channel assignment message of Claim 31 is native to a CDMA communications protocol, the channel assignment information of the channel assignment message is for a GSM communications protocol.